## **GENERAL NOTES**

ROUTE NO.	SEC.		COUNTY	TOTAL SHEETS	SHEET NO.
FAP 301 (US 20)	3	HBR-2	Winnebago	171	3
FED ROAD DIST. NO.		ILLINOIS	PROJECT		
Contract #64292	?				

See cross sections for special ditches and backslopes.

The removal of Bituminous Surfacing not on a rigid type base removed in conjunction with the base shall be removed as EARTH EXCAVATION. The removal of Bituminous Surfacing on a rigid type base removed in conjunction with the base shall be included in the contract unit price for PAVEMENT REMOVAL of the type specified.

The final top 100 mm (four inches) of soil in any right-of-way area disturbed by the Contractor must be capable of supporting vegetation. The soil must be from the A horizon (zero to 2' deep) of soil profiles of local soils.

All Borrow/Waste/Use sites must be approved by the Department prior to removing any material from the project or initiating any earthmoving activities, including temporary stockpiling outside the limits of construction.

Previously pugmilled stockpiles of "Type A" older than 1 month will not be approved for use until a moisture check is run to verify moisture content. Material shipped to projects without being tested will not be accepted.

Placement and compaction of the backfill for proposed across road culverts and existing across road culverts that are removed shall conform to Section 502.10 of the Standard Specifications, except that the material shall conform to Article 208.02 of the Standard Specifications, and shall be compacted to a minimum of 95% of the standard laboratory density. Any material conforming to the requirements of Article 1003.04 or 1004.05 which has been excavated from the trenches shall be used for backfilling the trenches. The entire excavation, within 2 feet outside of each shoulder, shall be backfilled with trench backfill material to the bottom of the proposed subgrade. This trench backfill material will not be measured for payment, but shall be included in the contract unit price for the class of concrete involved or other unit price item of the work for which it is required.

The subgrade on this project, exclusive of rock cut areas is scheduled to be improved to a 300 mm (12") depth according to Mechanistic Pavement Design. The areas scheduled to be improved to a depth greater than 300 mm (12") are estimated based on the original geotechnical investigation. The subgrade shall be processed in accordance with Article 301.03 of the Standard Specifications before the engineer shall determine the limits and the additional thickness of improvement required, if any. Any additional undercutting required after this evaluation shall be paid for as EARTH EXCAVATION.

Except for the top 75 mm (3"), all aggregate bases and subbases 300 mm (12") in thickness shall be constructed of aggregate gradation CA-2. If the specified thickness exceeds 300 mm (12"), the bases or subbases shall be constructed of topsize 150 mm (6") breaker-run crushed stone with 70% to 90% by weight, passing the 4" sieve and 15% to 40% by weight, passing the 50 mm (2") size sieve, except for the top 75 mm (3"). The breaker-run crushed stone shall be reasonably uniformly graded from coarse to fine and be taken from a quarry ledge capable of producing Class "D" quality aggregate. The top 75 mm (3") shall be gradation CA-6 or CA-10 regardless of thickness. The water necessary to achieve compaction in all but the top 75 mm (3") layer may be added after the subbase or base course is placed on the grade.

All embankment constructed of cohesive soil shall be constructed with not more than 110% of optimum moisture content, determined by the standard proctor test. Cohesive soil shall be defined as any soil which contains greater than 10% particles by weight passing the 75 µm (#200 sieve). The 110% of optimum moisture limit may be waived in free-draining granular material when approved by the Engineer.

Closed expansion joints on jointed pavements shall be re-established during the patching operations. Class B Patches - when the pavement requires patching at the location of the expansion joint, a new joint should be established using a dowelled expansion patch as shown on Highway Standard 442101. When the joint is closed, but does not require patching, an expansion joint may be formed by sawing the pavement and filling the saw cut with a preformed expansion joint filler meeting the requirements of Section 1051 of the Standard Specifications as shown on Standard 420001.

All mandatory joint sealing for Class A, Class B, and Class B (Hinge Jointed) patches as shown on the plans will not be measured for payment. Optional sawing of the joint for the sealant reservoir will not be measured for payment.

For all concrete patching that will not be resurfaced, the concrete shall be struck off flush with the existing pavement surface at each end of the patch.

The Engineer reserves the right to check all patches for smoothness by the use of a 10' rolling straight edge set to a 3/16" tolerance in the wheel paths. Any patch areas higher than 3/16" must be ground smooth with an approved grinding device consisting of multiple saws. The use of bushhammer or other impact devices will not be permitted. Any patch with depressions greater than 3/16" shall be repaired in a manner approved by the Engineer.

The mandatory saw cuts for pavement patching are:

<u>Class A Patch</u>: Cut two transverse saw cuts at each end of the patch; one full depth and one partial depth. The longitudinal edges of the patch shall be cut full depth. When the patch is adjacent to a pcc shoulder, two saw cuts along the shoulder will be required.

<u>Class B Patch</u>: Cut two transverse saw cuts outlining the patch and one transverse pressure relief saw cut. The longitudinal edges of the patch shall be cut full depth. When the patch is adjacent to a pcc shoulder, two saw cuts along the shoulder will be required.

The mandatory saw cuts will be paid for at the contract unit price per Meter (Foot) for SAW CUTS.

The following Mixture Requirements are applicable for this project:

Mixture Uses(s):	Surface	Top Shoulder	Bottom Shoulder	Binder
PG:	SBS PG 70-22	PG 58-22	PG 58-22	SBS PG 70-22
Design Air Voids	4.0 @ N90	3.0 @ N50	2.0 @ N50	4.0 @ N90
Mixture Composition	IL 9.5 or 12.5	IL 9.5 or 12.5	BAM or IL 19.0	IL 9.5 or 12.5
(Gradation Mixture)				
Friction Aggregate	E	С	N/A	N/A
20 Year ESAL	4.4	N/A	N/A	N/A

The Contractor will be required to furnish 140 mm (5 1/2") high brass stencils as approved by the Engineer and install stationing at 250' intervals. Stationing shall be placed on both lanes of 2-lane highways and on the outside lanes in both directions on 4-lane highways. The stations shall be placed 150 mm (6") inside the pavement marking edge so they can be read from the shoulder. This work will be included in the cost of the final pavement surface.

Install rumble strips in all shoulders in accordance with State Standard 642001. Rumble Strips shall be placed on shoulders on both sides of the pavement.

These structures will retain the same numbers 101-0065 (EB) and 101-0066 (WB).

The contractor shall submit four copies of the required shop drawings for review and approval to the Bureau of Bridges and Structures, 2300 South Dirksen Parkway, Springfield, IL 62764. After approval of initial submittal, the contractor shall submit one set of shop drawings to Dave Lippert, Engineer of Materials, 126 East Ash Street, Springfield, IL 62706, and eight (8) sets of shop drawings to be distributed to:

District 2 District Engineer (1)
Fabricator (1)
Contractor (2)
Resident Engineer (2)
District 2 Bureau of Materials (2)

The review and approval of temporary sheet piling will require 4 to 6 weeks. The Contractor shall schedule his work accordingly.

Program #5 (Arch. Size) Enlarge 200% inlarge 107%